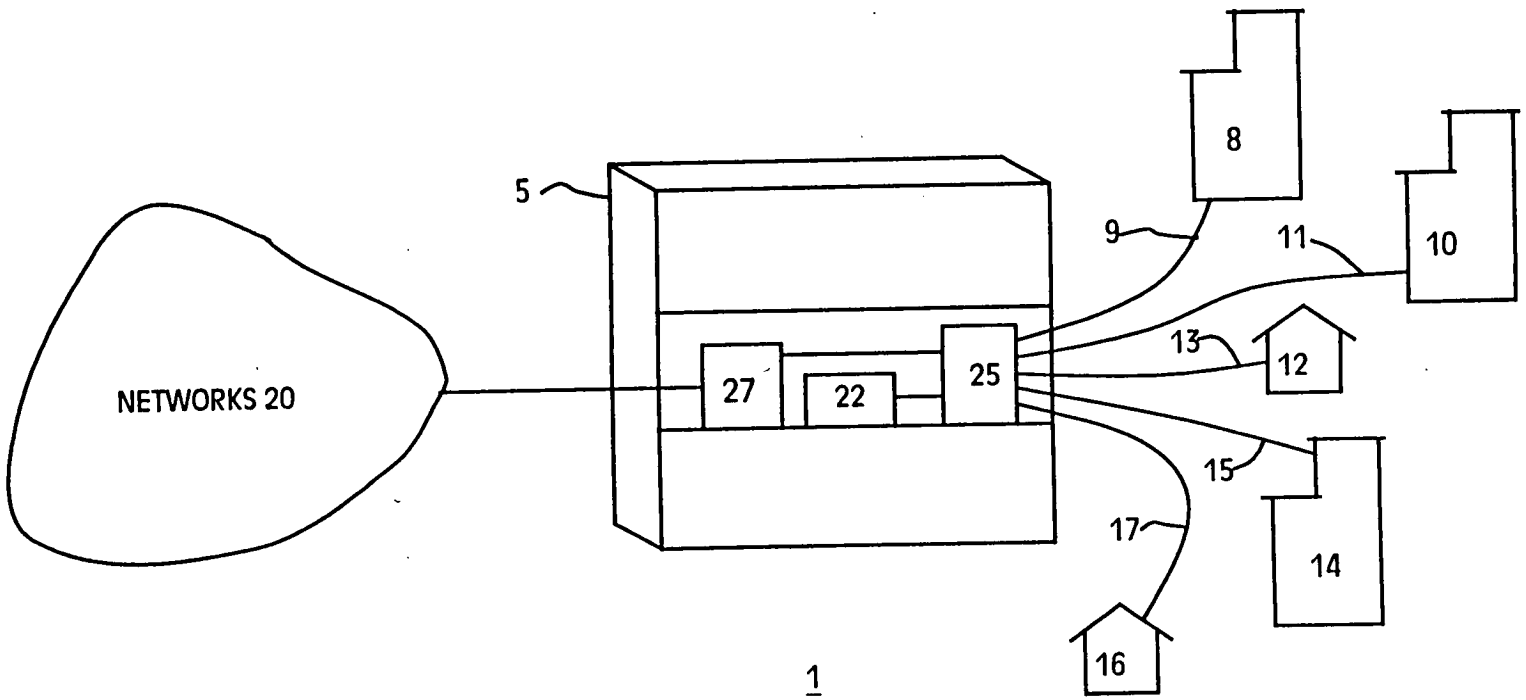


Fig. 1

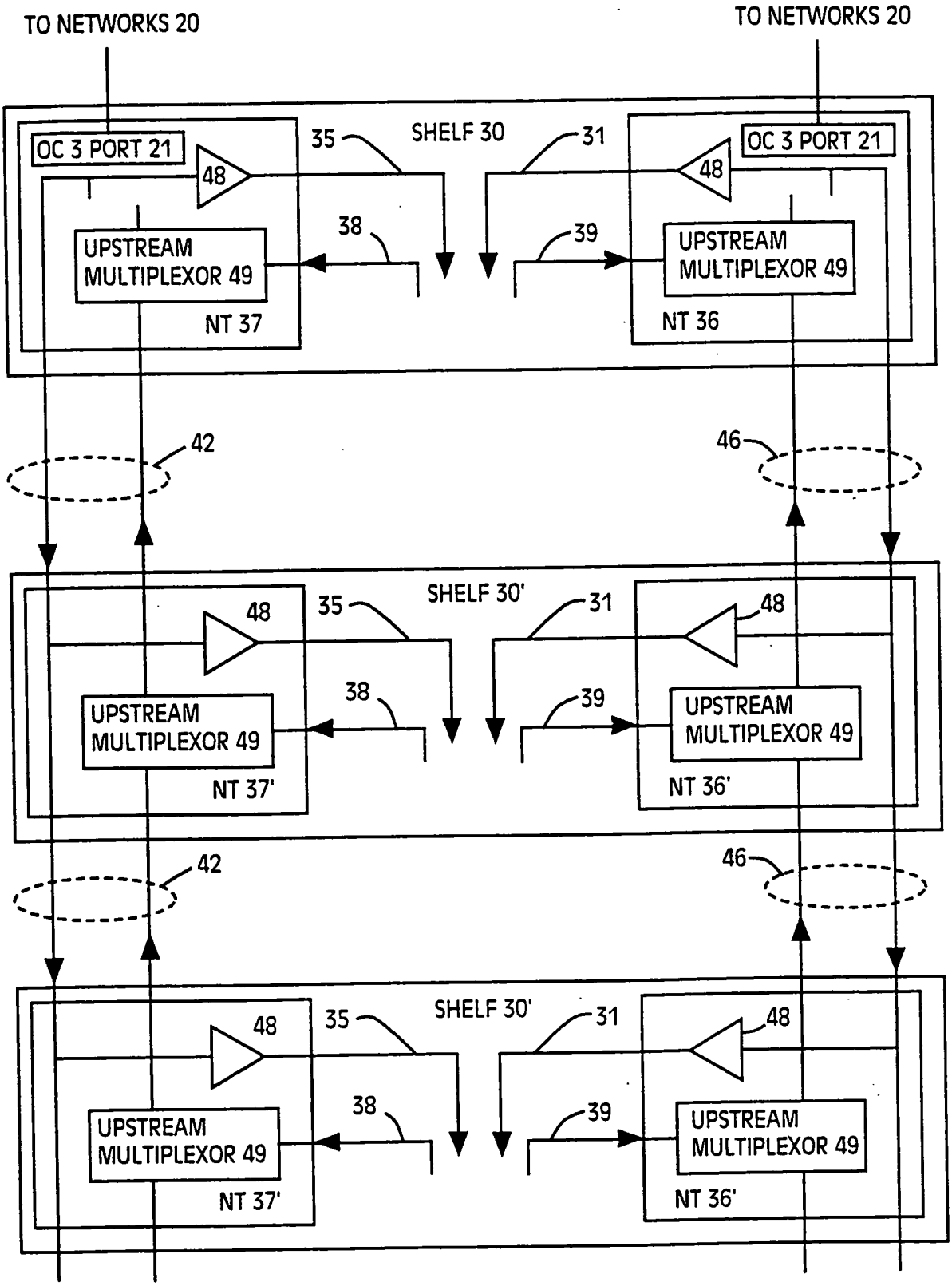

TO NETWORKS 20
TO NETWORKS 20
OC 3 PORT 21
48
35
SHELF 30
31
OC 3 PORT 21
48
38
39
UPSTREAM MULTIPLEXOR 49
NT 37
UPSTREAM MULTIPLEXOR 49
NT 36
42
46
48
35
SHELF 30'
31
48
38
39
UPSTREAM MULTIPLEXOR 49
NT 37'
UPSTREAM MULTIPLEXOR 49
NT 36'
42
46
48
35
SHELF 30'
31
48
38
39
UPSTREAM MULTIPLEXOR 49
NT 37'
UPSTREAM MULTIPLEXOR 49
NT 36'

Fig. 2

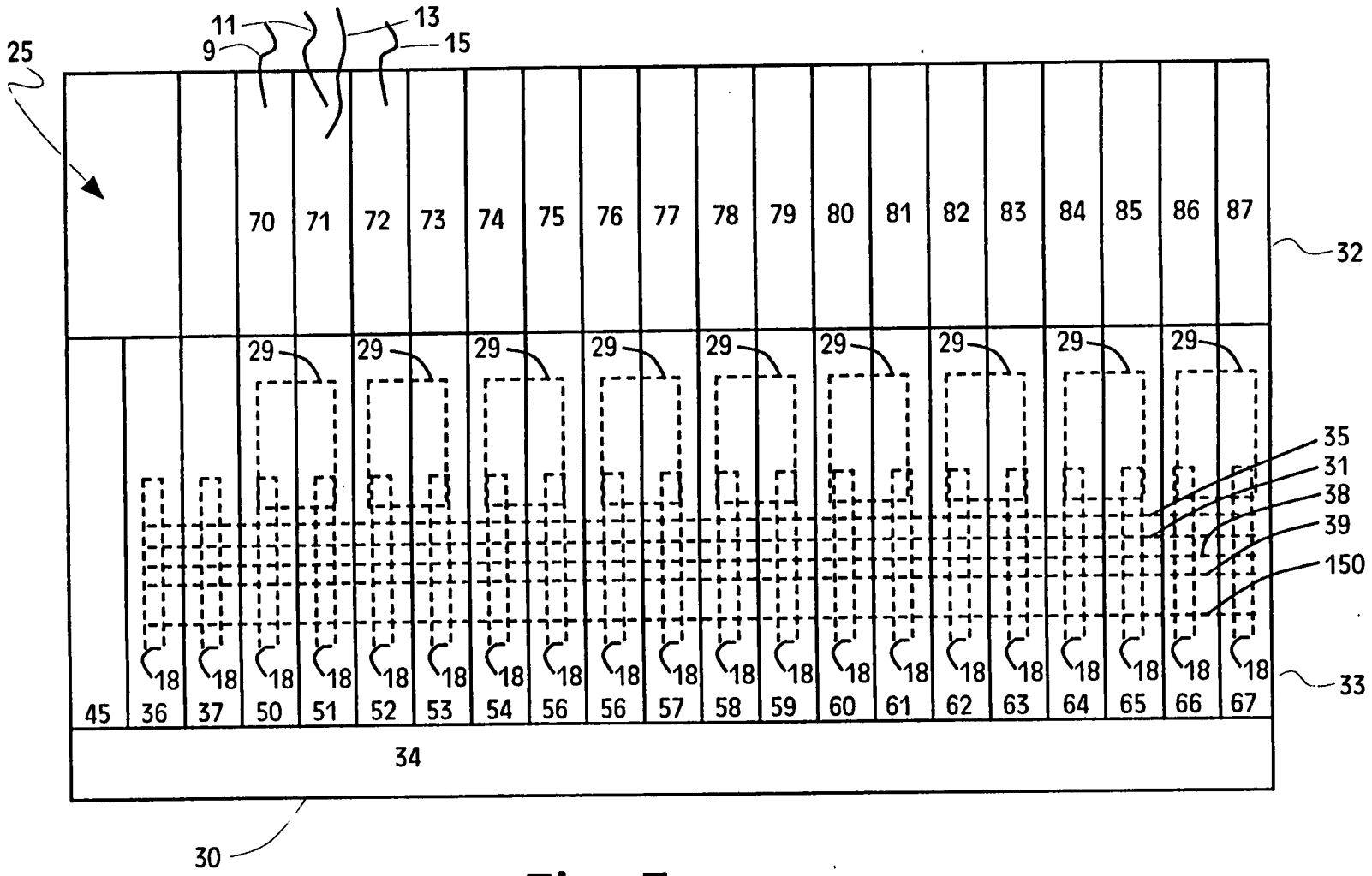

25
11
9
13
15
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
32
29
35
31
38
39
150
18
33
45
36
37
50
51
52
53
54
56
56
57
58
59
60
61
62
63
64
65
66
67
34
30

Fig. 3

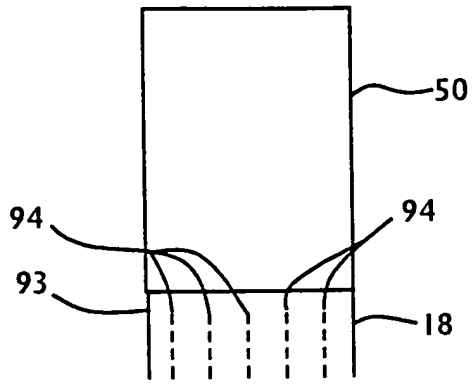


Fig. 4

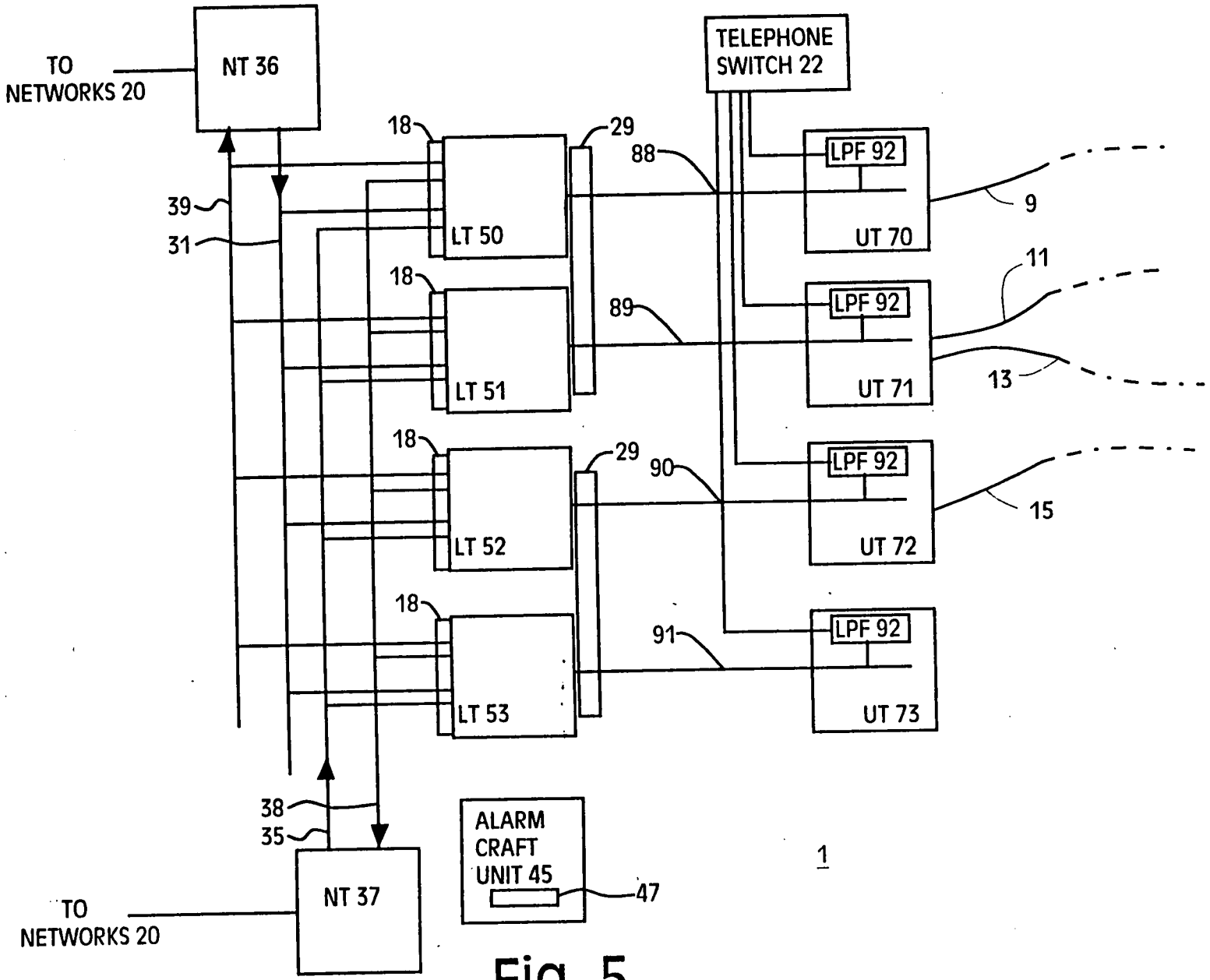

TO NETWORKS 20
NT 36
TELEPHONE SWITCH 22
18
29
88
LPF 92
UT 70
9
39
31
LT 50
18
11
89
LPF 92
UT 71
13
LT 51
18
29
90
LPF 92
UT 72
15
LT 52
18
91
LPF 92
UT 73
LT 53
38
35
ALARM CRAFT UNIT 45
47
1
NT 37
TO NETWORKS 20

Fig. 5

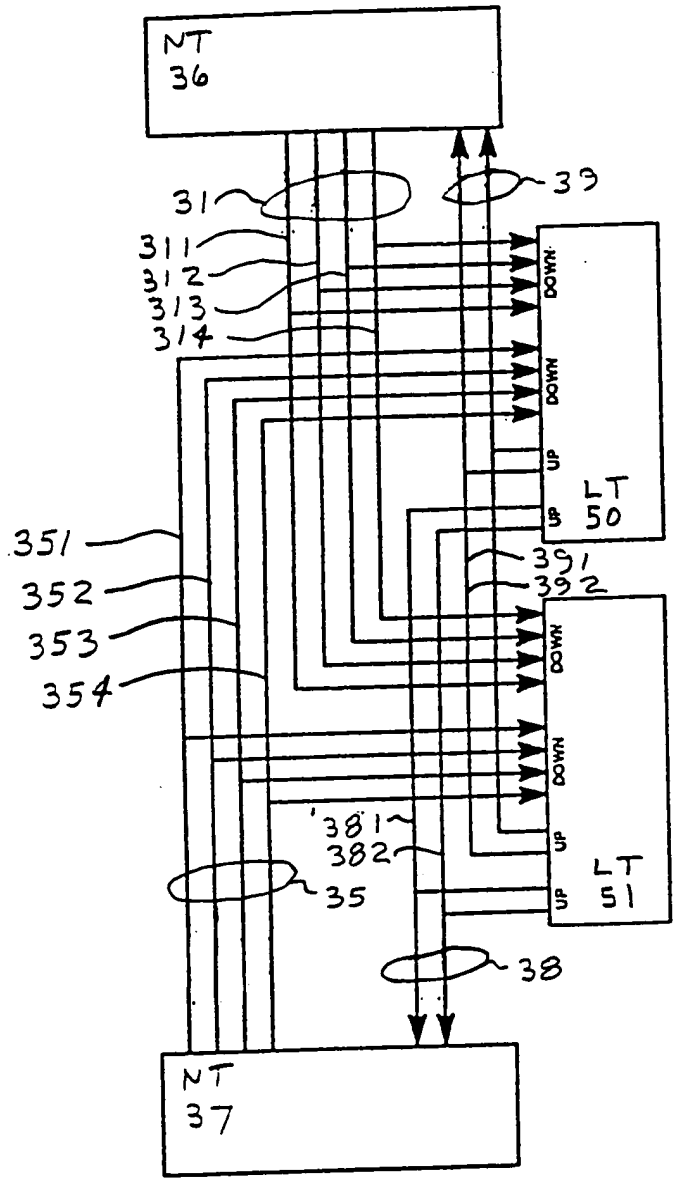

NT
36
31
39
311
312
313
314
DOWN
DOWN
UP
UP
LT
50
351
352
353
354
391
392
DOWN
DOWN
UP
UP
LT
51
381
382
35
38
NT
37

FIG. 6

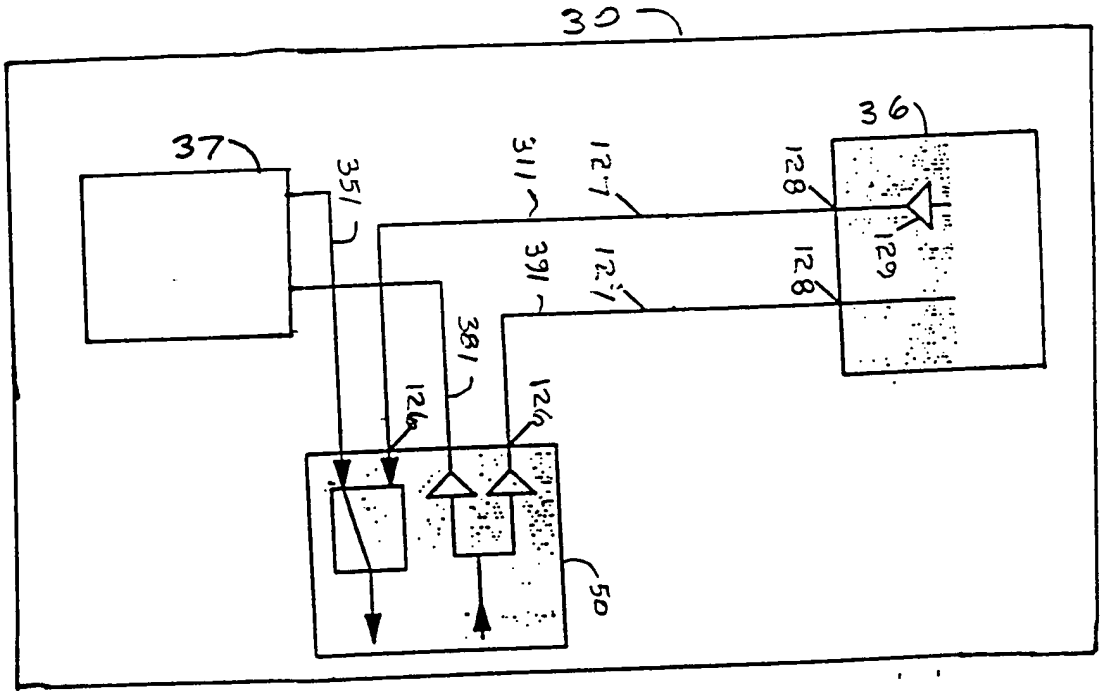


FIG. 7

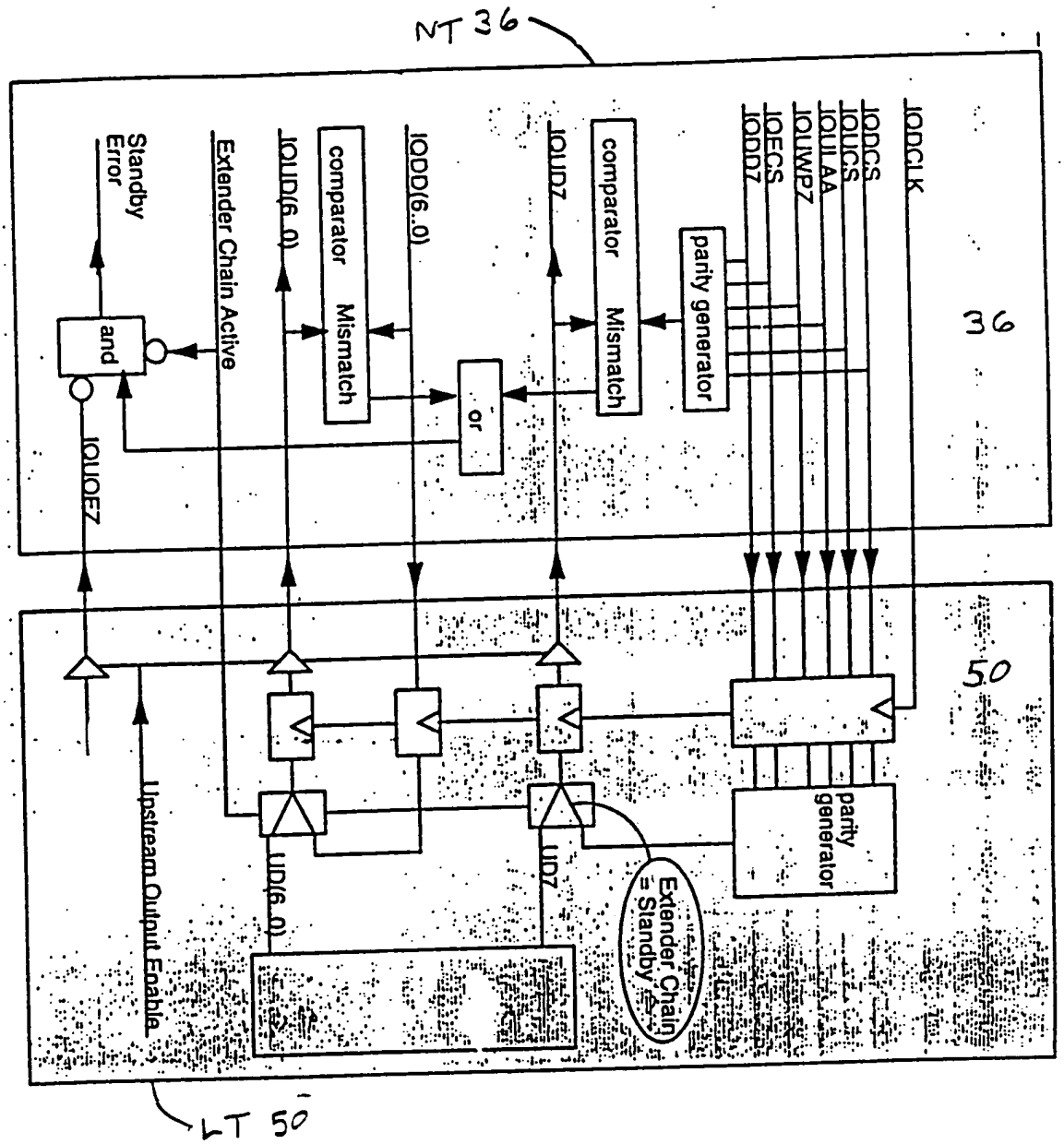

NT 36
IODCLK
IODCS
IOUCS
IOULAA
IOUWPZ
IOECS
IODDZ
parity generator
comparator Mismatch
IOUDZ
IODD(6..0)
comparator Mismatch
IOUD(6..0)
Extender Chain Active
Standby Error
and
or
IOUOEZ
36
50
parity generator
Extender Chain = Standby
UDZ
UD(6..0)
Upstream Output Enable
LT 50

FIG. 8

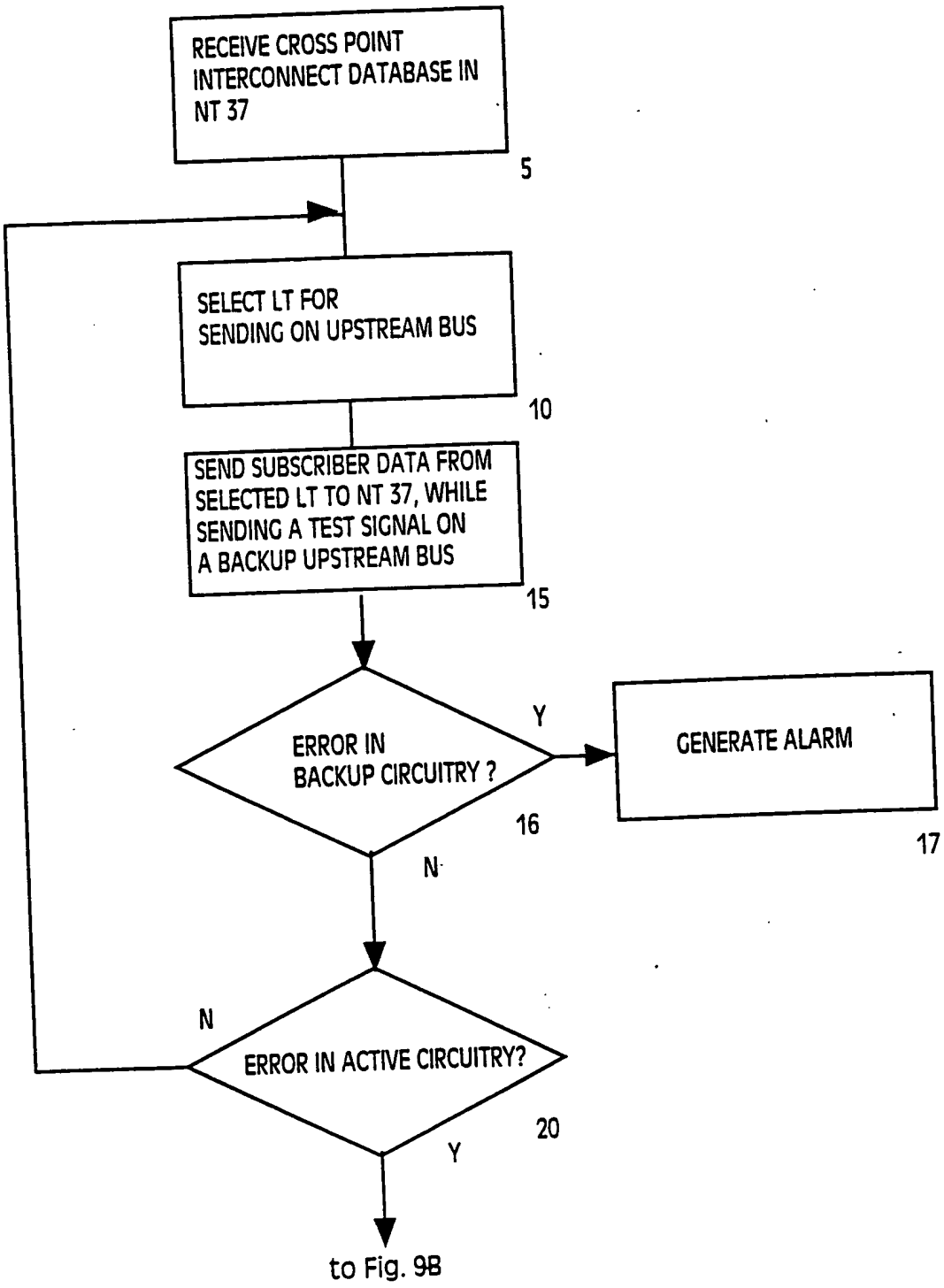

RECEIVE CROSS POINT INTERCONNECT DATABASE IN NT 37
5
SELECT LT FOR SENDING ON UPSTREAM BUS
10
SEND SUBSCRIBER DATA FROM SELECTED LT TO NT 37, WHILE SENDING A TEST SIGNAL ON A BACKUP UPSTREAM BUS
15
ERROR IN BACKUP CIRCUITRY ?
16
Y
GENERATE ALARM
17
N
ERROR IN ACTIVE CIRCUITRY?
20
N
Y
to Fig. 9B

FIG. 9A

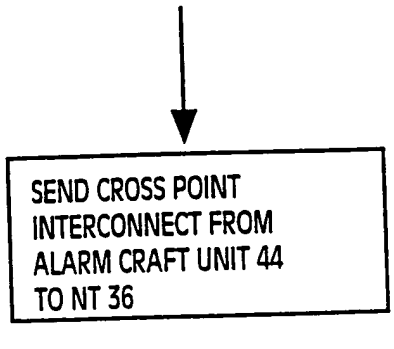
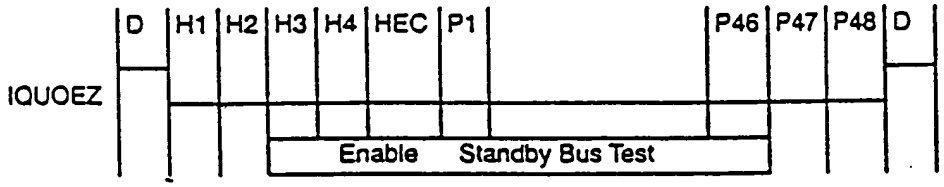

SEND CROSS POINT
INTERCONNECT FROM
ALARM CRAFT UNIT 44
TO NT 36
25

FIG. 9B

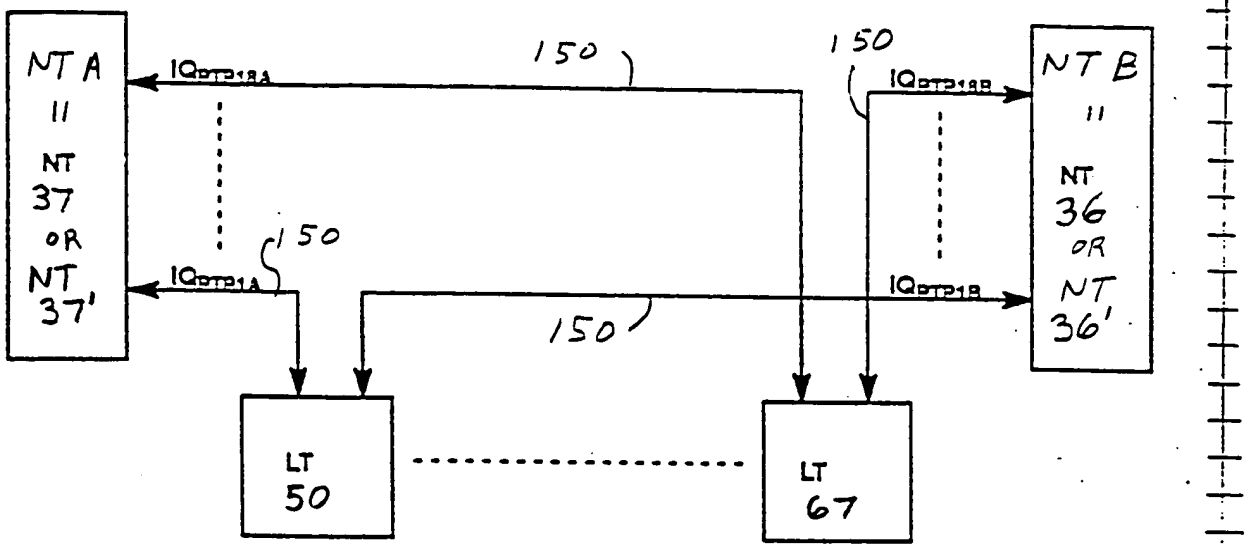
Standby Bus Test Pattern								
	cell n	n+1	n+2	n+3	n+4	n+5	n+6	n+7
IQDCS	1	1	1	1	0	0	0	0
IQUCS	0	1	1	1	1	0	0	0
IQULAA	0	0	1	1	1	1	0	0
IQUWP	0	0	0	1	1	1	1	0
IQDD7	0	0	0	0	1	1	1	1

FIG. 10



Standby Bus Test enabling

FIG. 11



IQ Point–To–Point links A *(Differential Pairs)*		
Signal Name	*#*	*Description*
IQTXA<17:0>_T/F	36	Transmit 'A' Point–To–Point links between NT and LT's
IQRXA<17:0>_T/F	36	Receive 'A' Point–To–Point links between NT and LT's

IQ Point–To–Point links B *(Differential Pairs)*		
Signal Name	*#*	*Description*
IQTXB<17:0>_T/F	36	Transmit 'B' links Point–To–Point between NT and LT's
IQRXB<17:0>_T/F	36	Receive 'B' links Point–To–Point between NT and LT's

FIG. 12

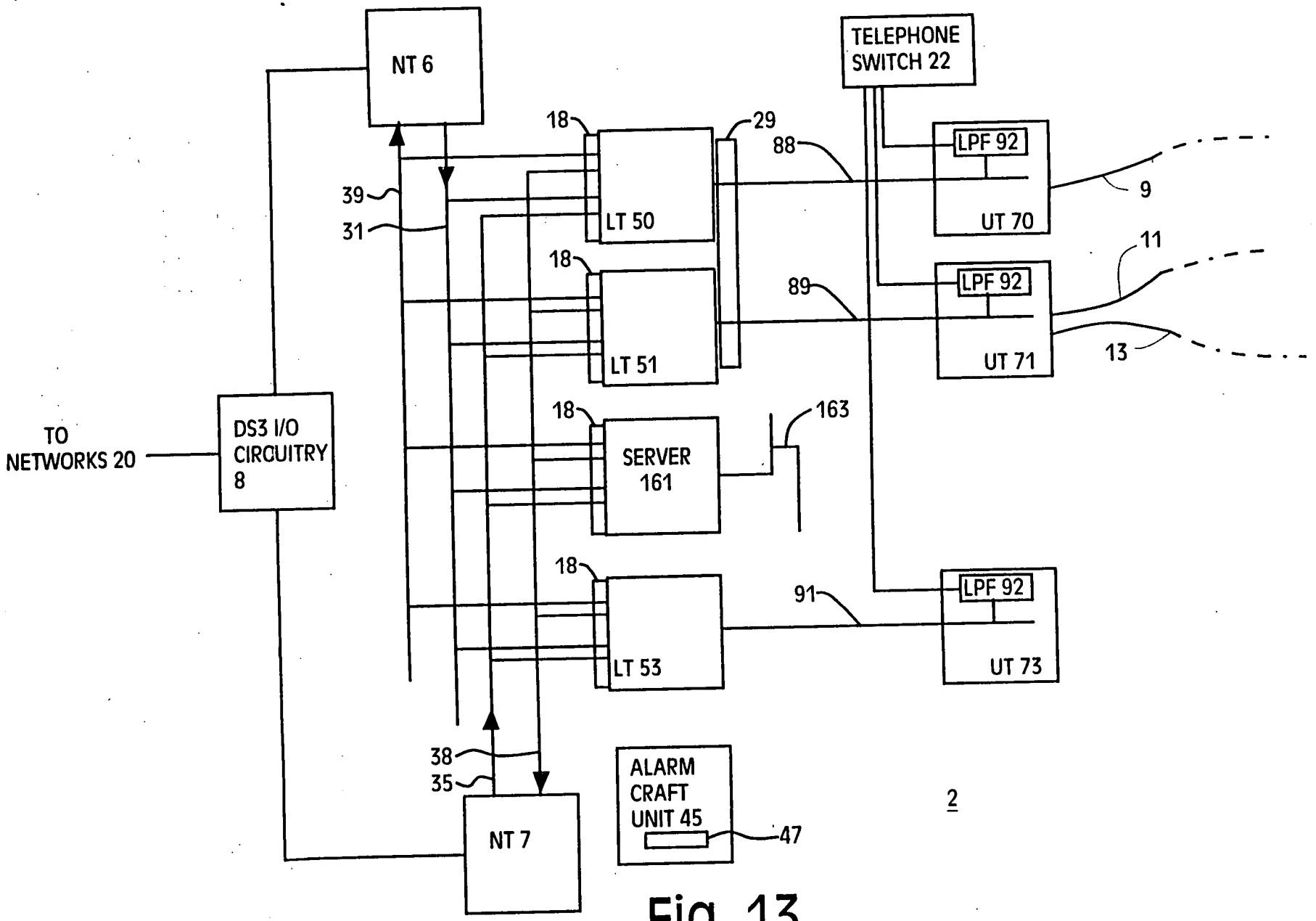

NT 6
TELEPHONE SWITCH 22
18
29
88
LPF 92
UT 70
9
39
31
LT 50
18
11
89
LPF 92
LT 51
UT 71
13
TO NETWORKS 20
DS3 I/O CIRCUITRY 8
18
163
SERVER 161
18
91
LPF 92
LT 53
UT 73
38
35
ALARM CRAFT UNIT 45
47
NT 7
2

Fig. 13